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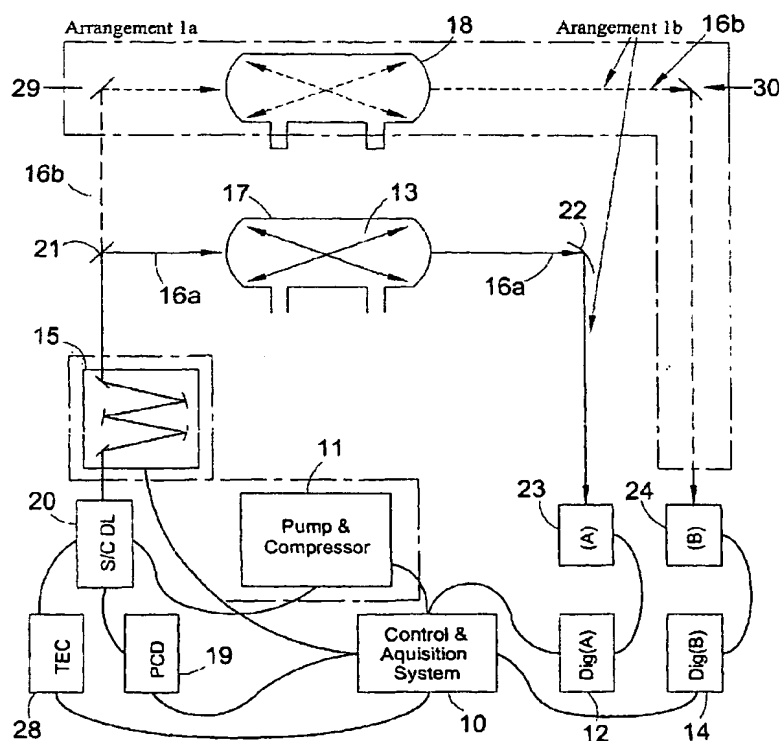
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- (71) Applicant and  
(72) Inventor: **NORMAND, Erwan** [FR/GB]; Flat G/R, 1 Grantley Gardens, Shawlands, Glasgow, G41 3PY (GB).
- (72) Inventors; and  
(75) Inventors/Applicants (for US only): **LANGFORD, Nigel** [GB/GB]; 8 Kincaid Way, Milton of Campsie, Glasgow, G66 8DT (GB). **DUXBURY, Geoffrey** [GB/GB]; 26 Melven Avenue, Bearsden, Glasgow, G61 2AZ (GB).
- (74) Agents: **MACDOUGALL, Donald, Carmichael et al.**; Cruikshank & Fairweather, 19 Royal Exchange Square, Glasgow G1 3AE (GB).
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(54) Title: SEMICONDUCTOR DIODE LASER SPECTROMETER ARRANGEMENT AND METHOD



(57) Abstract: A method apparatus for sensing gases using a semiconductor diode laser spectrometer, the method comprising: introducing a sample gas into a non-resonant optical cell (17); applying a step function electrical pulse (19) to a semiconductor diode laser (20) to cause the laser (20) to output a continuous wavelength chirp for injecting (16a) into the optical cell (17); injecting (16a) the wavelength chirp into the optical cell (17); using the wavelength variation provided by the wavelength chirp as a wavelength scan, and detecting (23) light emitted from the cell (17), wherein a chirp rate is selected to substantially prevent light interference occurring in the optical cell (17).

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